Specification

Please amend the paragraph starting at page 1, line 19 as follows:

-The block copolymers of the present invention as mentioned above are prepared by coupling oligomers containing terminal reactive group of formula (2) claimed in our "<u>Tri-block</u>

<u>Copolymers and a Process for the Preparation of the SameOligomers and preparation</u>

thereof '(Copending Application No. 10/697,970) herein below with polymers containing terminal reactive group as given below (Formula 3)

$$\begin{array}{c} R \\ | \\ -CH_2 - C \\ C \rightarrow_{\Pi} S CH_2 CH_2 Z \\ C = O \\ | \\ O \\ | \\ Y \end{array}$$

Formula (2)

wherein, R is H, CH₃, C₂H₅, C₆H₅, n is from 2 to 50, Z can be a OH or NH₂ group, Y may be N-Acetyl Glucosamine, mannose, galactose, sialic acid, fructose, ribulose, erythrolose, xylulose, psicose, sorbose, tagatose, glucopyranose, fructofuranose, deoxyribose, galactosamine, sucrose, lactose, isomaltose, maltose, cellobiose, cellulose and amylose.

Formula (3)

wherem, R is H,CH₃,C₂H₅,C₆H₅, m is 3 to 500, L is OH, NH₂,OCH₃, NHCH(CH₃)₂

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Block copolymers may be used for inhibition of viral infections and the recoveries of biomolecules. The approach of coupling two reactive polymers with polyvalent ligand N-Acetyl Glucosamine (NAG) is generic and can be used for other ligands such as sialic acid, galactose and mannose.—

Please amend the paragraph starting at page 13, line 22 as follows:

The present invention involves coupling of NAG oligomers comprising terminal functional group adequately described and covered in our "Tri-block Copolymers and a Process for the Preparation of the SameOligomers and preparation thereof," (Copending Application No. 10/697.970) with polymers containing terminal reactive group. The block copolymerization of the oligomer with other polymer will always result in NAG sequences in juxtaposition with one another which will exhibit more pronounced inhibition than random polymers containing the same concentration of the ligand. The applicant have further demonstrated that block copolymers containing carbohydrate including NAG units as oligomers, bind to lysozyme more strongly as evidenced by values of K_b and inhibit lysozyme more efficiently as evidenced by values of I_{50} . There is tremendous enhancement in interactions even the ligand concentration is very small, which indicates the steric stabilization effect.—

Please amend the paragraph starting on page 15, line 1 to read as follows:

--In our "Tri-block Copolymers and a Process for the Preparation of the SameOligomers and preparation thereof" (Copending Application No. 10/697,970) the applicant have shown that the oligomers of NAG in which the NAG groups are juxtaposed to one another, bind more effectively to lysozyme as reflected in values of binding constant (K_b) and the inhibition concentrations I₅₀. In the conventional technique of free radical copolymerization the distribution of moreomers along the polymer chain depends upon the values of the monomer reactivity ratios which are determined primarily by the intrinsic structure of the monomer. Consequently the distribution of the NAG units in the copolymers comprising monomers bearing NAG cannot be tailored at will using conventional copolymerization techniques.--

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